July 2001

Visit the Technical Standards Program Web Site at http://tis.eh.doe.gov/techstds/.

Standards Actions





DOE Technical Standards Program Document Status

06-27-2001

Activity Summary

In Conversion - 4

In Preparation - 42

Out for Comment - 15

Published this Month - 1



5-year Review Status

Revision in Progress - 4

Reaffirmation in Progress – 2

Supersedure in Progress - 6

Cancellation Pending – 8

Cancellation in Progress - 2

No Current Action - 35

Inside this issue:

DOE Technical Standards Project Initiated	1
DOE Technical Standard Recently Sent for Coordination	1
DOE Technical Standard Recently Published	1
American National Standards Institute	2
American National Standards	3

American Society for Testing and

Materials

DOE Technical Standards Projects Initiated

Complete listings of all DOE Technical Standards projects and their status are given on the Technical Standards Program (TSP) Web Site (http://tis.eh.doe.gov/techstds/). To access these lists from the home page, click on "DOE Technical Standards," then click on "Projects" in the left-hand frame to show the links to the project lists.

The following DOE Technical Standards projects were recently initiated:

- Evaluating a Lubrication Program Using the Lubricant Cycle, Project Number MNTY-0026, Author: Charles B. Ramsey, EH-53; 301-903-5999; Fax: 301-903-6172; Chuck.Ramsey@hq.doe.gov.
- Safety and Health Program for DOE Construction Projects, Project Number OCSH-0003, Author: DOE Construction Safety Advisory Committee, Contact: Pat Finn; EH-53; 301-903-9876; Fax: 301-903-6172; Pat.Finn@eh.doe.gov. If you have any questions or are interested in participating in the development of this standard, you should contact your organization's representative on the DOE Construction Safety Advisory Committee (see http://tis-nt.eh.doe.gov/whs/TechComm/csacmemb.html for membership roster).

DOE Technical Standard Recently Sent for Coordination

The appropriate Technical Standards Managers (TSMs) will request specific reviewers to comment on this draft. The full text of the document is available on the TSP Web Site. If you wish to comment on this document, please notify your TSM.

The following draft DOE Technical Standard was recently distributed for coordination.

 Quality Assurance Functional Area Qualification Standard: DOE Defense Nuclear Facilities Technical Personnel, TRNG-0018; Norm Schwartz, U.S. Department of Energy, EH-53, 19901 Germantown Road, Germantown, Maryland 20874-1290; 301-903-2996; Fax: 301-903-6172; Norm.Schwartz@eh.doe.gov. Comments due August 10, 2001.

DOE Technical Standard Recently Published

The following DOE Technical Standard Change Notice was recently published and posted on the TSP Web Site:

• DOE-HDBK-1130-98, Radiological Worker Training, Change Notice 1, June 2001.

<u>DOE employees and DOE contractors</u> may obtain copies from the ES&H Technical Information Services, U.S. Department of Energy; 1-800-473-4375, Fax 301-903-9823.

<u>Subcontractors and the general public</u> may obtain copies from the U.S. Department of Commerce, Technology Administration, National Technical Information Service, Springfield, Virginia 22161; 703-605-6000, Fax 703-605-6900.

Non-Government Standards

American National Standards Institute

The American National Standards Institute (ANSI) publishes coordination activities of non-Government standards (NGS) biweekly in *ANSI Standards Action*. Recent electronic copies (no hardcopies are produced) are available on the ANSI Web site at http://web.ansi.org/rooms/room_14/. Electronic back copies are available to ANSI members only. For information on site membership, ask your local ANSI contact. For information on individual or group ANSI membership, contact Susan Bose at 212-642-4948 or <a href="mailto:standard: specific standard: specific standard: specific standard: specific standard: specific standard: specific standard: specific specific standard: specific standard: specific speci

Hardcopy versions of published non-Government standards listed in this section may be obtained from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado, 80112, 800-854-7179, Fax 303-397-2740, **global@ihs.com**, **http://global.ihs.com**. Electronic delivery of selected documents is available through ANSI at **http://webstore.ansi.org**. Copies of the listed draft standards and the procedure for commenting on them may be obtained by contacting the standards developing organization.

The following listings are extracted from ANSI Standards Action and are representative of NGS development activities that may be relevant to DOE operations. Refer to ANSI Standards Action for a more extensive listing of changes and new publications, standards developing organizations, and additional information about submitting comments. Additional information on ANSI activities and available non-Government standards can be found on the ANSI Web site, http://www.ansi.org, or through the National Standards System Network, http://www.nssn.org.

<u>The following American National Standards are currently in coordination</u> (comment due dates follow each entry):

- ASME B89.4.1b, Methods for Performance Evaluation of Coordinate Measuring Machines (supplement to ANSI/ASME B89.4.1-1997) – August 14, 2001.
- ASTM E494, Practice for Measuring Ultrasonic Velocity in Materials (reaffirmation of ANSI/ASTM E494-95) July 31, 2001.
- ASTM E1032, Test Method for Radiographic Examination of Weldments (revision of ANSI/ASTM E1032-95) July 31, 2001.
- ASTM E1316, Terminology for Nondestructive Examinations (revision of ANSI/ASTM E1316-00A) July 31, 2001.
- ASTM Z5291Z, Test Method for Examination of Gas-Filled Filament-Wound Composite Pressure Vessels

- using Acoustic Emission (new standard) July 31, 2001.
- ASTM Z8903Z, Practice on Statistical Assessment and Improvement of the Expected Agreement Between Two Test Methods that Purport to Measure the Same Property of Material (new standard) – July 31, 2001.
- B11.1, Safety Requirements for Mechanical Power Presses (revision of ANSI B11.1-1988 (R1994)) – July 30, 2001.
- EIA 554-1-1996, Assessment of Average Outgoing Quality Levels in Parts Per Million (PPM) (SP-4957) (reaffirmation of ANSI/EIA 554-1-1996) – August 14, 2001.
- EIA 554-2-1996, Assessment of Nonconforming Levels in Parts Per Million (PPM) (SP-4958) (reaffirmation of ANSI/EIA 554-2-1996) August 14, 2001.
- EIA 554-A-1996, Method Selection for Assessment of Non-conforming Levels in Parts Per Million (PPM) (SP-4959) (reaffirmation of ANSI/EIA 554-A-1996) – August 14, 2001.
- EIA 555-1988, Lot Acceptance Procedure for Verifying Compliance with the Specified Quality Levels (SQL) in PPM (SP-4960) (reaffirmation of ANSI/EIA 555-1988 (R1997)) August 14, 2001.
- EIA 584-1991, Zero Acceptance Number Sampling Procedures for Tables for Inspection by Attributes of a Continuous Manufacturing Process (SP-4961) (reaffirmation of ANSI/EIA 584-1991 (R1997)) – August 14, 2001.
- EIA 585-1991, Zero Acceptance Number Sampling Procedures for Tables for Inspection by Attributes of Isolated Lots (SP-4962) (reaffirmation of ANSI/EIA 585-1991 (R1997)) – August 14, 2001.
- EIA 591-1992, Assessment of Quality Levels in PPM using Variables Test Data (SP-4963) (reaffirmation of ANSI/EIA 591-1992 (R2000)) – August 14, 2001.
- ISA 12.00.01, Electrical Apparatus for Use in Class I, Zones 0, 1 & 2 Hazardous (Classified) Locations: General Requirements (new standard) – July 31, 2001.
- ISA 12.22.01, Electrical Apparatus for Use in Class I, Zone 1 Hazardous (Classified) Locations: Type of Protection – Flameproof "d" (revision and redesignation of ANSI/ISA S12.22.01-1998 (IEC 60079-1 Mod)) – July 16, 2001.

(Continued on page 3)

(Continued from page 2)

- N13.36, Ionizing Radiation Safety Training for Workers (new standard) August 14, 2001.
- NB 23-2000 Addendum, National Board Inspection Code (revision of ANSI/NB 23-2000 Addendum) – August 14, 2001.
- NEMA IA 2.1-1993/IEC 61131, Part 1, Programmable Controllers – Part 1: General Information (reaffirmation and redesignation of ANSI/NEMA IA 2.1-1993) – August 14, 2001.
- NEMA IA 2.2-1993/IEC 61131, Part 2, Programmable Controllers – Part 2: Equipment Requirements (reaffirmation and redesignation of ANSI/NEMA IA 2.2-1993) – August 14, 2001.
- NEMA IA 2.3-1993/IEC 61131, Part 3, Programmable Controllers – Part 3: Programming Languages (reaffirmation and redesignation of ANSI/NEMA IA 2.3-1993) – August 14, 2001.
- NEMA IAS 2.4-1996/IEC 61131, Part 4, Programmable Controllers – Part 4: User Guidelines (reaffirmation and redesignation of ANSI/NEMA IAS 2.4-1996) – August 14, 2001.
- UL 508C, Standard for Safety for Power Conversion Equipment (revision of ANSI/UL 508C-2000) August 14, 2001.
- Z535.1, Safety Color Code (revision of ANSI Z535.1-1998) – July 16, 2001.

The following American National Standards have been approved for publication (Publication is to take place within six months following the date shown. Publication status and ordering information may be obtained from ANSI's Customer Service at 212-642-4900.):

- ANSI N13.39-2001, Design of Internal Dosimetry Programs (new standard) May 24, 2001.
- ANSI/API 572-2001, Inspection of Pressure Vessels (Towers, Drums, Reactors, Heat Exchangers, and Condensers) (revision of ANSI/API 572-1992) – May 22, 2001.
- ANSI/ASME B56.1a-2001, Low Lift and High Lift Trucks (supplement to ANSI/ASME B56.1-2000) – May 11, 2001.
- ANSI/ASTM D1531-01, Test Methods for Relative Permittivity (Dielectric Constant) and Dissipation Factor by Fluid Displacement Procedures (revision of ANSI/ASTM D1531-95) – March 10, 2001.
- ANSI/ASTM D2865-01, Practice for Calibration of Standards and Equipment for Electrical Insulating Ma-

- terials Testing (revision of ANSI/ASTM D2865-95) March 10, 2001.
- ANSI/ASTM D3382-95 (R01), Test Methods for Measurement of Energy and Integrated Charge Transfer Due to Partial Discharges (Corona) Using Bridge Techniques (reaffirmation of ANSI/ASTM D3382-95) – March 10, 2001.
- ANSI/ASTM D5568-01, Test Method for Measuring Relative Complex Permittivity and Relative Magnetic Permeability of Solid Materials at Microwave Frequencies (revision of ANSI/ ASTM D5568-95) – March 10, 2001.
- ANSI/ASTM F1060-01, Test Method for Thermal Protective Performance of Materials for Protective Clothing for Hot Surface Contact (revision of ANSI/ASTM F1060-87 (R1993)) April 10, 2001.
- ANSI/AWS C5.2-2001, Plasma-Arc Cutting, Recommended Practices (revision of ANSI/AWS C5.2-83 (R1994)) May 4, 2001.
- ANSI/UL 38-2001, Standard for Safety for Manually Actuated Signaling Boxes for Use with Fire-Protective Signaling Systems (revision of ANSI/UL 38-1993) – April 27, 2001.

The following international standards are currently in coordination (comment due dates follow each entry):

- IEC/DIS 80416-3, Basic principles for graphical symbols for use on equipment Part 3: Guidelines for the application of graphical symbols August 19, 2001.
- ISO/DIS 128-1, Technical drawings General principles of presentation Part 1: Introduction and index August 4, 2001.
- ISO/DIS 6962, Nuclear energy Standard method for testing the long-term alpha irradiation stability of solidified high-level radioactive waste forms September 8, 2001.
- ISO/DIS 14830-1, Condition monitoring and diagnostics of machines Tribology-based monitoring and diagnostics Part 1: General guidelines August 18, 2001.
- ISO/DIS 15535, General requirements for establishing an anthropometric database August 25, 2001.
- ISO/DIS 15586, Water quality Determination of trace elements by atomic absorption spectrometry with graphite furnace – August 11, 2001.
- ISO/DIS 19011, Guidelines for quality and/or environmental management systems auditing – September 1, 2001.

The following newly published international standards are available:

- IEC 60534-3-2 Ed. 2.0 b:2001, Industrial-process control valves – Part 3-2: Dimensions – Face-to-face dimensions for rotary control valves except butterfly valves.
- IEC 60695-9-2 TR2 Ed. 1.0 b:2001, Fire hazard testing – Part 9-2: Surface spread of flame – Summary and relevance of test methods.
- IEC 61518 Ed. 1.0 b:2001, Mating dimensions between differential pressure (type) measuring instruments and flanged-on shut-off devices up to 413 BAR (41,3 MPa).
- IEC 62198 Ed. 1.0 b:2001, Project risk management Application guidelines.
- ISO 702-1:2001, Machine tools Connecting dimensions of spindle noses and work holding chucks Part 1: Conical connection.
- ISO 5349-1:2001, Mechanical vibration Measurement and evaluation of human exposure to handtransmitted vibration – Part 1: General requirements.
- ISO 5667-18:2001, Water quality Sampling Part 18: Guidance on sampling of groundwater at contaminated sites.
- ISO 10099:2001, Pneumatic fluid power Cylinders Final examination and acceptance criteria.
- ISO 11660-5:2001, Cranes Access, guards and restraints Part 5: Bridge and gantry cranes.
- ISO 14246:2001, Transportable gas cylinders Gas cylinder valves Manufacturing tests and inspections.
- ISO 14644-4:2001, Cleanrooms and associated controlled environments Part 4: Design, construction and start-up.
- ISO 15664:2001, Acoustics Noise control design procedures for open plant.

American National Standards Projects Initiated

The following is a list of proposed new American National Standards or revisions to existing American National Standards submitted to ANSI by accredited standards developers. DOE employees or contractors interested in participating in these activities should contact the appropriate standards developing organization. DOE-TSL-4 lists the DOE representatives on NGS committees. If no DOE representative is listed, contact the TSPO for information on participating in NGS activities.

Institute of Nuclear Materials Management

Office: 109 Caldwell Drive Oak Ridge, TN 37830

Fax: 865-482-9580

Contact: John Arendt, jwarendt@aol.com

- N14.1-2000 Addendum 1a, Uranium Hexafluoride Packaging for Transport, Addendum 1a (supplement to ANSI N14.1-2000).
- N14.6, Radioactive Materials Special Lifting Devices for Shipping Containers Weighing 10 000 Pounds (4500 kg) or More (reaffirmation of ANSI N14.6-1993).
- N14.27-1986 (R1993), Carrier and Shipper Responsibilities and Emergency Response Procedures for Highway Transportation Accidents Involving Truckload Quantities of Radioactive Materials (reaffirmation of ANSI N14.27-1986 (R1993)).

American Society for Testing and Materials

Standards activities of the American Society for Testing and Materials (ASTM) are published monthly in ASTM Standardization News. Orders for subscriptions or single copies of ASTM Standardization News may be submitted to ASTM, Subscription Dept.-SN, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959. For information regarding ASTM membership, contact the Membership Services Department at 610-832-9691 (Fax 610-832-9667). ASTM publications may be ordered from the ASTM Customer Services Department at 610-832-9585 (Fax 610-832-9555). Comments on listed draft standards may be submitted by contacting the ASTM Standards Coordination Department at the above address. Questions may be addressed to the Technical Committee Operations Division at 610-832-9672 (Fax 610-832-9666). Additional information on ASTM activities is available on the ASTM Web site (http://www. astm.org). The following listings are extracted from ASTM Standardization News and are representative of NGS development activities that may be relevant to DOE operations.

The following newly published standards are available from ASTM:

- C 1274-00, Test Method for Advanced Ceramic Specific Surface Area by Physical Adsorption (revised standard).
- C 1282-00, Test Method for Determining the Particle Size Distribution of Advanced Ceramics by Centrifugal Photosedimentation (revised standard).
- C 1291-00a, Test Method for Elevated Temperature Tensile Creep Strain, Creep Strain Rate, and Creep

(Continued on page 5)

(Continued from page 4)

Time-to-Failure for Advanced Monolithic Ceramics (revised standard).

- C 1348-01, Specification for Blended Uranium Oxides with a ²³⁵U Content of Less Than 5% for Direct Hydrogen Reduction to Nuclear Grade Uranium Dioxide (revised standard).
- D 5280-96 (2001), Practice for Evaluation of Performance Characteristics of Air Quality Measurement Methods with Linear Calibration Functions (reapproval of standard).
- D 5835-95 (2001), Practice for Sampling Stationary Source Emissions for the Automated Determination of Gas Concentrations (reapproval of standard).
- D 6299-00a, Practice for Applying Statistical Quality Assurance Techniques to Evaluate Analytical Measurement System Performance (revised standard).
- D 6577-00a, Guide for Testing Industrial Protective Coatings (revised standard).
- D 6596-00, Practice for Ampulization and Storage of Gasoline and Related Hydrocarbon Materials (new standard).
- D 6604-00, Practice for Glass Transition Temperatures of Hydrocarbon Resins by Differential Scanning Calorimetry (new standard).

- E 122-00, Practice for Calculating Sample Size to Estimate, with a Specified Tolerable Error, the Average for a Characteristic of a Lot or Process (revised standard).
- E 473-00, Terminology Relating to Thermal Analysis (revised standard).
- E 1245-00, Practice for Determining the Inclusion or Second-Phase Constituent Content of Metals by Automatic Image Analysis (revised standard).
- E 1695-01, Test Method for Measurement of Computed Tomography (CT) System Performance (revised standard).
- E 1815-01, Test Method for Classification of Film Systems for Industrial Radiography (revised standard).
- E 1858-00, Test Method for Determining Oxidation Induction Time of Hydrocarbons by Differential Scanning Calorimetry (revised standard).
- E 2012-00, Guide for the Preparation of a Binary Chemical Compatibility Chart (revised standard).
- F 923-00, Guide to Properties of High Visibility Materials Used to Improve Individual Safety (revised standard).

Comments, Questions, and Addresses

Comments: If you have any questions or comments, please contact Rick Serbu, EH-53, Manager, DOE Technical Standards Program Office (TSPO), 301-903-2856, Fax 301-903-6172, **Richard. Serbu@eh.doe.gov**.

Addresses: Standards Actions and The Standards Forum are electronic newsletters available on the TSP Web Site (http://tis.eh.doe.gov/techstds/). To update your mailing and e-mail addresses, please contact Amy Bush, ORNL, 865-576-2395, Fax 865-574-8481, bushar@ornl.gov.

Technical Standards Activities: The TSPO would like to be kept informed of the status of technical standards that are being prepared or coordinated for DOE. Please provide this information to the TSPO at 865-576-2395, **bushar@ornl.gov**.

Please note: The building number, mail stop, and fax number for the TSPO at ORNL have changed. The building number is 9204-1, mail stop 8051; the fax number is 865-574-8481.